Charles River Watershed Association

February 6, 2009

Ira Leighton
Action Regional Administrator
EPA New England, Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Re: Comments on Residual Designation Pursuant to Clean Water Act Region I.

Dear Acting Regional Administrator Leighton:

The Conservation Law Foundation ("CLF") and Charles River Watershed Association ("CRWA") are pleased to offer the following comments regarding the November, 2008 Record of Decision of the U.S. Environmental Protection Agency Region 1 Office ("EPA") documenting the determination of EPA Region 1 pursuant to its Residual Designation Authority under Section 402(p)(2)(E) of the federal Clean Water Act, 33 U.S.C. § 1342(p)(2)(E); and corresponding regulations,[1] to require reductions in polluted storm water runoff from existing private development in the Charles River watershed.

CLF and CRWA applaud EPA for moving forward with this first-in-the nation program. We recognize the Region's commitment, including that of former Regional Administrator Varney, to cleaning up the Charles and to full implementation of the Clean Water Act. We also recognize the significant staff time and effort that have been both devoted to developing the Record of Decision and in the future, to developing and enforcing the permitting program. We urge EPA to issue the draft general permit swiftly and to notify dischargers of their obligation to obtain coverage

Data and information in EPA's possession developed by EPA, the Commonwealth of Massachusetts, and third parties, including parcel analyses based on impervious acreage coverage, indicate that this determination should be extended to all similar discharges throughout the Charles River watershed, and expanded to include properties with one acre or more of impervious cover. Extending the program watershed-wide is warranted by the legal and factual circumstances and would create better consistency of programs with the Massachusetts Department of Environmental Protection ("MassDEP") proposed

[1] 40 CFR §§ 122.26(a)(1)(v), 122.26(a)(9)(i)(D), 122.26(f)(2).

The 1987 amendments further directed EPA to phase in a comprehensive national regulatory program for stormwater discharges. 33 U.S.C. §§ 1342(p)(4), (6). EPA's Phase I stormwater rule, while focused on industrial polluters and urban areas, continued to recognize the need, pursuant to CWA § 402(p)(2)(E), for "immediate permitting" of stormwater discharges that contribute to violations of water quality standards. NPDES Permit Application Regulations for Storm Water Discharges, 55 Fed. Reg. 47990, 47993 (November 16, 1990).

In its Phase II stormwater rule, EPA again affirmed the importance of immediately regulating stormwater discharges that contribute to water quality impairments. See, Regulations for Revision of the Water Pollution Control Program Addressing Stormwater Discharge, 64 Fed. Reg. 68,721, 68,781 (Dec. 8, 1999), codified at 40 CFR §§ 122.26(a)(1)(v) and 122.26(a)(9)(i)(D). The Phase II rules went a step further, however, and "expanded [the agency's] authority to issue permits on a significantly broader basis, for wholesale categories of discharges in a geographic area." In re Stormwater NPDES Petition, 2006 VT 91, ¶ 12. This allows the agency to issue RDA discharge-permit determinations "on a geographic or a categorical basis within identified geographic areas such as a State or watershed." 64 Fed. Reg. 68,736 (codified at 40 C.F.R. § 122.26(a)(9)(i)(D)). EPA has explained that this broader permitting authority would "facilitate and promote" the overarching goal of "coordinated watershed planning." Id. at 68,739. See also In re Stormwater NPDES Petition, 2006 VT 91, ¶ 12. The inclusion of RDA designation authority in the regulations was upheld against industry challenge. Envt'l Def. Ctr. v. EPA, 344 F.3d 832, 875-76 (9th Cir. 2003).

2. **Sound Science Shows That Water Quality Standards in the Charles Can't Be Met Without Retrofits Of the Existing Facilities Specified In This ROD**

The Lower Charles Nutrient TMDL and a strong body of additional scientific and technical evaluations conducted by EPA, MassDEP and other parties support the necessity of regulating existing private development in the Charles River.
The Lower Charles nutrient TMDL is one of the most comprehensive nutrient pollution TMDLs in the nation. It provides a thorough analysis of the dramatic reductions in nutrient pollution needed to restore the river, and documents that polluted stormwater runoff from privately owned impervious areas are the largest unregulated source of phosphorus flowing into the river. The TMDL is particularly comprehensive in that it includes a quantitative evaluation of the phosphorus contributions attributable to storm water runoff by land use type and geographic areas in the Charles River watershed. CLF and CRWA commend EPA for contributing the necessary resources to perform this technical evaluation and for taking the regulatory steps necessary to begin to achieve the loading reductions identified in the TMDL.

In 2007, EPA also approved a TMDL for pathogens that requires end-of-the-pipe limits on pathogens in critical areas of the Charles. The Charles River bacteria TMDL is based on extensive data and information and indicates that stormwater is the largest remaining source of pathogen loading that causes the river to be unsafe. There is extensive wet-

weather data documenting pathogen levels in-stream and at numerous outfalls that violate pathogen standards. To correct these violations will similarly require retrofit of existing impervious areas to capture and treat polluted runoff before it enters the river either through direct runoff or through existing stormwater infrastructure.

3. **Permitting Private Commercial, Industrial, Institutional and High-Density Residential Facilities is Equitable and is Essential to Meeting Water Quality Targets**

Regulation of all contributing discharges is not only legally required, but also the most equitable, efficient, and effective means of ensuring that the Charles River meets its water quality standards. The EPA has estimated that there are 7.7 million commercial and industrial discharges nationwide that do not currently have Clean Water Act retrofit permits. Of these, 1.2 million are significantly-sized activities that cause discharges of polluted storm runoff. Unless and until EPA asserts residual designation under the Clean Water Act, these discharges are not required to obtain retrofit permits.[6]

Absent an RDA designation, the burden for meeting water quality standards has fallen upon a small group of stormwater dischargers (MS4s, industrial activities, and construction projects) that currently fall under CWA jurisdiction.[7] Cash-strapped municipalities have expended staff time and resources to comply with the MS4 permit requirements.[8] Yet to date, existing commercial and retail development, institutions, and high-density residential properties, have largely not been required to do their fair share to address the pollution problems that imperil the Charles River, and the Commonwealth's and the nation's waterways.

This is not only unfair, but also – as indicated by the long history of water quality violations in the Charles River and by the TMDL allocations – will be incapable of achieving attainment of state water quality standards. The Lower Charles TMDL, and subsequent analysis by EPA and MassDEP has reaffirmed that unless private commercial, industrial, and high-density residential lots are required to reduce their inputs of phosphorus and other pollutants, water quality standards and the TMDL targets simply cannot be met in the Charles River.

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[6] "Storm Water Discharges Potentially Addressed By Phase II of the National Pollutant Discharge Elimination System Stormwater Program" Report to Congress (EPA March 1995) at 4-12 – 4-22.

[7] See, e.g., 33 U.S.C. § 1342(p)(3)(A) (permits for stormwater discharges associated with industrial activity, including construction activities, must meet the CWA § 301(b)(1)(C) mandate to include any more stringent limitation necessary to meet water quality standards).

[8] While compliance and water quality outcomes under the MS4 program have varied widely, we expect that EPA will reissue a stronger, more enforceable MS4 permit for Massachusetts in 2009 and that municipalities, having had over five years since the effective date of the first MS4 permit, and ten years since the initial Federal Register notice announcing the program, will devote the necessary resources to fully comply with this program. A 2008 federal court order in CLF et. al. v. Deval Patrick et. al., a lawsuit by CLF, CRWA, and the Leominster Land Trust against the Massachusetts Highway Department, confirmed that towns and other dischargers covered under the 2003 Massachusetts MS4 permit must design and implement their stormwater management plans such that water quality standards and TMDL requirements will be met, including installing structural retrofits where needed.

4. CLF and CRWA Strongly Support EPA's Determinations Under 40 C.F.R §§ 122.26(a)(9)(i)(C) and (D)

CLF and CRWA strongly concur with EPA's determination that the agency has the authority and obligation to require permits that require retrofits when a wasteload allocation in an approved TMDL shows that "stormwater controls are needed" on polluted stormwater runoff pipes. 40 CFR § 122.26(a)(9)(i)(C). This provision requires that operators of such discharges "shall be required to obtain a NPDES permit," based on the Lower Charles TMDL's findings and land use analysis. We also strongly concur with EPA's determination that it has the authority, and obligation, to require such permits based on EPA's findings that a discharge or category of discharges within a geographic area, here, a watershed, are contributing to a violation of water quality standards. 40 C.F.R. § 122.26(a)(9)(i)(C).

EPA's analysis in the Record of Decision is exceedingly clear and well-supported in discussing how the Lower Charles TMDL and additional water quality data and information about the Charles Watershed meet the applicable legal standards of 40 CFR §§ 122.26(a)(9)(i)(C) and (D). CLF and CRWA concur that there is more than sufficient basis for EPA to assert that the standards of 40 CFR § 122.26(a)(9)(i)(C) (necessary to achieve TMDL) and § 122.26(a)(9)(i)(D) (contribution to water quality standards violations) are each independently met throughout the Charles Watershed, in addition to in the towns of Bellingham, Franklin, and Milford.

5. Permitting Under the RDA Provision Is Not Optional

Exercise of "the Agency's residual designation authority is not optional." In re Stormwater NPDES Petition, 2006 VT 91, ¶ 28. Once a discharge, or a category of discharges, is determined to be contributing to a violation of water quality standards, the operator(s) of those discharges "shall be required to obtain a [NPDES] permit." 40 C.F.R. § 122.26(a)(9)(i)(D) (emphasis added). See also 33 U.S.C. § 1342(p)(2)(E) (requiring NPDES permits for discharges composed entirely of stormwater that are determined to contribute to a violation of a water quality standard). As EPA has explained, and consistent with the legislative history of the 1987 Amendments, "designation is appropriate as soon as the adverse impacts from storm water are recognized."[9]

EPA has not defined a threshold level of pollutant contribution that would trigger such a finding, but the agency has acknowledged that it "would be reasonable to require permits for discharges that contribute more than *de minimis* amounts of pollutants identified as

[9] Letter from Tracy Mehan, III, EPA Assistant Administrator to Ms. Elizabeth McLain, Secretary, Vermont Agency of Natural Resources re: guidance on issues related to permits for discharges to impaired waters, Sept. 16, 2003 (citing James R. Elder, Director EPA Office of Water Enforcement and Permits, Designation of Stormwater Discharges for Immediate Permitting at 2 (Aug. 8, 1990). ("Mehan Letter")

the cause of impairment to a water body."[10] This EPA analysis has been recognized as a valid interpretation of the RDA threshold by the Vermont Supreme Court.[11]

RDA determinations may be made directly by the NPDES permitting authority, or stem from the development of a TMDL wasteload allocation. See 40 C.F.R. § 122.26(a)(9)(i)(C). Additionally, any person may petition the "Director" or "Regional Administrator" to designate a discharge or category of dischargers under RDA. 40 C.F.R. § 122.26(f)(2); see also, In re Stormwater NPDES Petition, 2006 VT 91, ¶¶ 12-14 (RDA petitions need not be made on a case-by-case basis, but may seek designation for whole classes of discharges).

6. State or Local Programs Can Supplement, Not Supplant EPA's Residual Designation Authority

Opponents of this program may raise policy arguments in support of the position that point-source stormwater pollution should be regulated under state law only. These arguments overlook the fact that Massachusetts is not authorized to administer the NPDES permit program and fly in the face of the Constitutional scheme of separation of powers and the Vermont Supreme Court's 2006 ruling that state stormwater law may "supplement" federal Clean Water Act residual designation authority, but it may not "supplant" it.[12]

MassDEP's stated intention[13] to implement a state permitting regime to address current violations of water quality standards in this watershed (or others), while it may ultimately prove beneficial to water quality, does not excuse EPA from its obligation to assert federal permitting jurisdiction forthwith over contributing dischargers. Neither Massachusetts state law, nor MassDEP's proposed regulations provide for a level of overall water quality protection or citizen participation that is commensurate with that provided by and required under EPA's NPDES permitting program. Opponents are certain to assert that MassDEP is exceeding its authority given EPA's responsibility for NPDES permitting. While it behooves both EPA and MassDEP to coordinate their actions, ultimately EPA's implementation of RDA through a general permit must proceed unhindered in the Charles watershed (and other watersheds where designation is warranted by the criteria of 40 CFR §§ 122.26(a)(9)(i)(C) and (D)).

We recognize that local governments have a key role in the implementation of stormwater retrofits – in permitting and supervising their construction, assisting with siting of BMPs, identifying areas for off-site mitigation, assuring proper long-term operation and maintenance of stormwater controls, and in administering financing mechanisms such as stormwater utilities. However, RDA as established by Section 402(p)(2)(E) creates an obligation to issue federally enforceable NPDES permits, which, in turn, afford a high level of transparency and public participation.

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[10] See Mehan letter, at p. 3.
[11] In re Stormwater NPDES Petition, 2006 VT 91, ¶ 28, n.6.
[12] 2006 VT 91, ¶ 20.
[13] As reflected in Mass DEP's Draft Regulations to Amend 314 Mass. Code Regs. 21.00 et seq. (undated)

7. **Recommendations For Substantive Aspects of ROD and Forthcoming Permitting Program**

a. **Acreage Threshold** – The direct correlation between impervious area and stormwater pollution is well established, and therefore acreage of impervious surface is an appropriate measure on which to base a permitting threshold. This point is supported by ample discussion in EPA's Record of Decision (see *e.g.* p5), and ample data specific to the Charles watershed.[14] The acreage threshold should be one acre or greater imperviousness for commercial, industrial, institutional and high density residential throughout the watershed.

b. **Aggregation** – EPA has proposed following the aggregation methodology from the MassDEP's proposed regulatory program for certain stormwater discharges (314 CMR § 21.05) in order to determine whether a parcel or group of parcels will meet the 2 acre threshold. MassDEP's aggregation methodology has been widely criticized and may prove unfeasible. Aggregation is a key issue in this federal, EPA-administered RDA program, and we urge EPA to define in the forthcoming general permit a method of aggregation that will stand independently of the MassDEP program. Of course, the lower the acreage threshold, the less time-consuming and resource-intensive aggregation issues are likely to be, because more parcels will be clearly included in the program. To foster informed compliance, aggregation criteria should be clear to the regulated community as well as to EPA staff from an enforcement perspective. .

c. **Definition of "impervious area"** –The definition of impervious area in the ROD should be broadened to include compacted dirt roadways, macadam, and other surfaces intentionally compacted to prevent water infiltration into the subsurface. The definition of "impervious surface" in the EPA Region 1's recent Long Creek Record of Decision appears to be a more appropriate and encompassing definition.

d. **Exceptions/Exemptions** – A number of exemptions from the definition of "impervious surface" have been carved out, yet no rationale has been provided. Some of these types of land uses may be entirely appropriate to include in the program from a water quality and a practical standpoint.

In particular, sporting camps, manufactured home communities, and recreational vehicle parks may have significant impervious area. Our

[14] In particular, literature on stormwater runoff, as cited in the Record of Decision, has found that commercial, industrial, and high-density residential land uses contained the highest concentrations of pollutants of all land uses assessed, and that the concentrations of pollutants were twice as high as those of the next category (medium density residential.) Record of Decision, at 5.

preliminary research indicates that there are significant numbers of these facilities statewide, and a number are located in the Charles Watershed. Nothing about these types of land uses inherently guarantees that their stormwater runoff will not deliver the same types of pollutants as other commercial/industrial and high density residential land uses, and these facilities are in many cases operated for profit.

While we recognize that this ROD and forthcoming permitting program is appropriately designed to address the most concentrated, currently un-regulated stormwater pollution sources -- the way that subdivided developer-created communities would be handled under this program appears problematic because as currently structured, a developer could acquire a large tract of land in a sensitive area of the watershed, subdivide and pave large portions of it, causing new water quality problems or aggravating existing problems, yet be exempt from permitting requirements once the lots are sold.

General Permit – The General Permit should emphasize the need for Low Impact Development (LID) techniques to reduce stormwater flows and pollutant loads. Recent research and analyses conducted by EPA, MassDEP and other parties[15] strongly support the use of LID techniques for effective and efficient stormwater management. LID approaches are especially important in retrofit situations, where larger, conventional stormwater approaches are not feasible. In addition, EPA's recent Stormwater Best Management Practices (BMP) Performance Analysis, December 2008, demonstrates that LID type BMPs, especially those that maximize infiltration, are by far the most effective BMPs for reducing the stormwater load of phosphorus and other nutrients. The General Permit should reflect this research, and support the use of LID techniques where feasible.

8. Coordination With Other Permitting Programs

Detractors of the RDA program may argue it will result in duplication. This is not the case, as the facilities included in this designation are designated for permitting expressly *because* they are unregulated by other federal stormwater permitting programs, such as the MS4 program and the Industrial Multi-Sector General Permit ("MSGP").[16] Only the

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[15] See for example 'Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices,' EPA publication number 841-F-07-006, December 2007; Massachusetts Stormwater Handbook, Volumes 1 and 2, Revised February, 2008; 'Rooftops to Rivers,' Natural Resources Defense Council, May, 2006; 'Decentralized Stormwater Controls for Urban Retrofit and Combined Sewer Overflow Reduction' Water Environment Research Foundation Report 03-SW-3, April, 2006.

[16] It has been clear since adoption of the Phase I stormwater rule that MSGP jurisdiction extends only to portions of facilities that are "associated with industrial activity." Relying on legislative intent, EPA has consistently interpreted the jurisdictional scope of the permit to exclude "discharges associated with parking lots and administrative and employee buildings." 47990 FR 48010 Vol. 55, No. 22 (Nov. 16, 1990). In the Phase I rule preamble, EPA expressly noted that such excluded areas could be required to

Massachusetts Wetlands Protection Act program arguably could have such status since is projects in delineated resource areas or bordering areas must meet state-established minimum stormwater performance standards in order to be permitted by local Conservation Commissions. See Mass Gen. Laws Ch. 131 § 40; 31 Mass Code Regs. 10 (Massachusetts Wetlands Protection Act and corresponding regulations). However, state stormwater performance standards are designed to protect wetland resource areas across the state, not to meet the specific requirements identified in the Lower Charles TMDL nor to address the water quality problems documented by EPA in its Record of Decision.. While the Wetlands Protection Act regulatory program does provide crucial pollutant removal in ecologically sensitive areas, its jurisdictional scope is geographically limited, and its pollution reduction goals are not targeted to the Charles River.

9. Timeframe for Full Implementation Should be No More Than Three to Five Years

EPA has not proposed a time period for compliance, including implementation of stormwater retrofits. Retrofitting of covered dischargers should be accomplished as soon as possible, with interim deadlines established for measurable progress. Three years is an appropriate timeframe for retrofitting because it is short enough to encourage financial and logistical planning, while long enough to allow for some amortization of costs. A timeframe beyond five years for compliance would not meet applicable legal requirements under the NPDES program,[17] and from a practical standpoint, fails to motivate expeditious compliance and most importantly, would not result in significant improvements to water quality (and recharge) until a decade from now.[18]

Implementation of stormwater controls should be complete within a three- to five-year permit term, and the timeframe for retrofitting should include interim annual deadlines for design, funding, and installation stages of the process.

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obtain permit coverage "under section 402(p)(2)(E) of the amended CWA . . . by designating storm water discharges such as those from parking lots that are significant contributors of pollutants or contribute to a water quality standard violation." Id. To avoid any question, EPA should clarify that "discharges associated with parking lots and administrative and employee buildings" at MSGP-permitted facilities are specifically designated in implementing EPA's RDA program.

[17] Under the Clean Water Act and implementing regulations for the NPDES permit program, the duration of a NPDES permit cannot exceed five years. CWA § 402(b)(1)(B), 33 U.S.C. § 1342(b)(1)(B); 40 C.F.R. § 122.46.

[18] The state's potential permit timeframes are legally irrelevant to EPA's RDA determination and permitting:.EPA has an independent obligation based on federal law to notify dischargers of their obligation to obtain permits, and to implement and enforce such permits to meet water quality needs in the Charles watershed. EPA should not look to these inappropriately long timeframes proposed by the state for design and implementation of stormwater retrofits in establishing the terms of the forthcoming federal general permit.

10. **Permits Should be Clear, Enforceable, and Enforced**

An effective program requires effective enforcement, which, in turn, requires clear enforceable permit provisions with progress measurements built in. We urge EPA, in the forthcoming Draft General Permit, to include interim milestones toward design and construction of stormwater retrofits. In particular, clear language should be used to describe design parameters for stormwater infrastructure and retrofits, non-structural management practices such as sweeping or prevention of pollutants from reaching impervious surfaces, and operation and maintenance. We urge EPA to avoid language that has proved troublesome in the context of other stormwater permits, such as "to the maximum extent practicable."[19]

11. **Low-Impact Development Will Benefit Businesses and Communities**

Owners and operators of properties regulated under this program should utilize available technical assistance from EPA and from organizations like CRWA and others with expertise in the area to implement low-impact development practices ("LID") for managing stormwater. LID BMPs not only have water quality benefits, but can improve the visual appeal and value of a site, reduce flooding and heat island effects, and provide benefit to the community. Instead of portraying retrofitting of these properties in an economically negative light, the regulated community has an opportunity to improve the values of their properties by adding green space and aligning their infrastructure with modern standards. The rollout of this program in the Charles Watershed should include a strong outreach component so that regulated facilities understand the requirements and deadlines. CRWA stands ready to assist in this and to providing information about low-impact development stormwater techniques.

Implementation of the RDA program and of the Charles River TMDLs more broadly, present a huge opportunity for Massachusetts-based environmental consultants and construction firms to demonstrate successful outcomes in meeting these challenges. LID techniques will soon become the norm nationwide, as other states and watersheds grapple with similar water supply and pollution problems. Stormwater retrofits provide promise for expansion of a lucrative niche within the construction field.

12. **"Rollout" Of Program**

We urge EPA to move forward with extending permit coverage throughout the Charles watershed,[20] and to other watersheds in the Commonwealth facing similar pollution problems, in fairly short order.

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[19] See e.g. EPA Region 1 General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts and New Hampshire ("MS4 Permit"), effective May, 2003. Available at http://www.epa.gov/NE/npdes/permits/permit_final_ms4.pdf.

[20] To the extent that the ROD seems to suggest that EPA will need to do a full assessment over a number of years of the pilot effectiveness, see ROD at p. 23, before extending the program watershed-wide, this language should be removed. The Lower Basin TMDL and the ROD amply document the basis for immediately extending coverage and the necessity of retrofits watershed-wide.

Watershed-wide coverage provides a more equitable framework for businesses and communities, and will deliver benefits of improved water quality, recharge of groundwater, and increased "green space." EPA should extend this program over time to other watersheds in the state facing similarly severe, documented pollution problems attributable to stormwater, regardless of whether there is a completed TMDL. The science and land use analysis completed for the Upper and Lower Charles TMDLs, coupled with existing data and information specific to other watersheds, provide a strong basis for EPA regulating private stormwater discharges elsewhere in the Commonwealth.

This Record of Decision represents a crucial step on the path towards full implementation of the Clean Water Act as Congress envisioned it. We thank EPA for its efforts to date, and for the opportunity to comment, and look forward to further discussion with EPA, MassDEP, and the regulated community as this program moves forward.

Sincerely,

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